

THE REARING OF A COWBIRD BY ACADIAN FLYCATCHERS¹

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WHILE assisting Dr. George M. Sutton with his study of the nesting birds of the Edwin S. George Reserve (a 1,300-acre tract near Pinckney, Livingston County, southeastern Michigan), I discovered on June 22, 1946, the newly finished nest of a pair of Acadian Flycatchers (*Empidonax virescens*). I visited the nest repeatedly from June 22 to July 22, and observed the rearing of the brood, a single Cowbird (*Molothrus ater*).

Despite Bendire's (1895:304) statement that the Cowbird "imposes occasionally" on the Acadian Flycatcher; Evermann's (1889:23) statement that the Acadian Flycatcher is "one of the most frequent victims of the Cowbird" in Carroll County, Indiana; and Jacobs' (1924:53) record of 12 parasitized Acadian Flycatcher nests in southwestern Pennsylvania, I find no published account of the history of a parasitized Acadian Flycatcher nest and no definite record of the fledging of a young Cowbird by Acadian Flycatcher parents. Friedmann (1929:209) stated that he knew "but few definite" records of parasitism of the Acadian Flycatcher by the Cowbird.

The Flycatchers' nest-territory was in the Reserve's most extensive woodland—a uniform 130-acre stretch of oak-hickory forest known as the Big Woods. My attention was first attracted to the birds while Dr. Sutton and I were watching Cerulean Warblers at their nest from about 3:30 to 4:30 p.m. on June 22. During that hour, the Flycatchers called almost constantly, their cries coming from a dry kettle hole near us with a low ridge and open leatherleaf bog ("Buck Hollow") beyond it. Stationing myself in a well concealed spot, I watched the birds with my binocular, hoping that they would lead me to their nest.

The territory was much like three other Acadian Flycatcher territories that Dr. Sutton and I had found elsewhere in the Big Woods. Tall oaks and hickories darkly shaded the heavy under-story of witch hazel (*Hamamelis virginiana*) and sassafras (*Sassafras albidum*). The ground was thickly covered with dry leaves, and where the shadows were deepest, luxuriant stands of maiden-hair fern (*Adiantum pedatum*) grew. The area in general was shared by several pairs of nesting birds—Cerulean Warblers (*Dendroica cerulea*), Red-eyed Vireos (*Vireo olivaceus*), and Eastern Wood Pewees (*Myiochanes virens*). In the distance I could hear Scarlet Tanagers, Oven-birds, and Yellow-throated Vireos singing; from the other side of the kettle, a Yellow-billed Cuckoo continually clucked. Occasionally a Ruby-throated Hummingbird buzzed through the small openings in the woods, and I saw a female

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Cowbird accompanied by several males moving through the taller trees. Mosquitoes were abundant and caused me much discomfort as I tried to maintain a motionless position on the ground. The Acadian Flycatchers continued to call as they moved among the shadows from one low tree to another. Their call was usually a *peet*, with an occasional explosive *kit-a-rup*. Suddenly one of them darted onto what appeared to be a bit of hanging debris, but which proved to be a nest.

The body of the nest was composed of dried plant stems, held together by cobwebs. It was swung across an 80-degree fork at the end of one of the longer horizontal branches of a witch hazel. An eight-inch strand of entwined cobwebs with entangled flowers of oak or hickory hung from the rim. So flimsy and so loosely woven was the structure that I could easily see the tree-tops as I looked upward through the bottom. It appeared to be completed and ready for eggs. As I left the spot, one of the Flycatchers returned to the nest.

When Dr. Sutton visited the nest at 5:25 a.m., June 25, there was one egg. One egg was in the nest when he examined it an hour later.

On June 27, Dr. Sutton found two eggs in the nest at 6:10 a.m. When I went to the kettle hole at 11:20 the same morning, a Flycatcher (presumably the female) was on the nest. When I came within 30 feet it flew to a near-by sassafras sapling, whence it called excitedly. Its mate was near by, also calling. There were then three eggs. The third had been laid in the four-hour interval.

When I approached on June 29, at 6:30 a.m., a Flycatcher was on the nest. When it left, I found one Cowbird egg and one Flycatcher egg. Searching the ground below the nest, I found the two missing Flycatcher eggs—one broken in half, the other intact. There was no indication that either had been punctured by the Cowbird's bill (see Hann, 1941: 219). Both were heavily wreathed at the larger end with reddish brown splotches and dots; that remaining in the nest, curiously enough, was almost immaculate. The two eggs in the nest offered a striking contrast—the large Cowbird egg heavily spotted, the much smaller and differently shaped Flycatcher egg virtually unmarked. Both Flycatchers were nearby. As I withdrew, one of them flew to the nest.

Dr. Sutton visited the kettle hole on July 1, finding one Cowbird egg and one Flycatcher egg in the nest.

On July 12 I found both eggs hatched. Presumably they had hatched two days or so previously, the incubation period, as reported by Harold M. Holland, being 13 days (see Bent, 1942:190). The young Flycatcher was covered above with whitish-gray down. The Cowbird, which appeared to be three times as large as its fellow, was covered with blackish-gray down. The eyes of both birds were closed. The mouth lining of the Flycatcher was straw yellow, that of the Cowbird, dull pinkish-red. The Cowbird occupied far more than half of the nest space. With head resting on the rim, and bill pointed upward, it was able to lift its head for food far higher than its companion could. The



Figure 1. Acadian Flycatcher brooding young Cowbird.



Figure 2. Acadian Flycatcher nest after the young Cowbird had fallen through. (Photographed from directly above.)

